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DEPARTMENT OF STATE LANDS

MARC RACICOT, GOVERNOR

P.O. BOX 201601

STATE OF MONTANA

(406) 444-2074

1625 ELEVENTH AVENUE
HELENA, MONTANA 59620-1601

PLEASE RETURN

April 30, 1993

Dear Reader:

Enclosed for your review is an Environmental Assessment (EA) prepared by the Department of State Lands (DSL). The EA evaluates a proposal by Weaver Gravel to expand a rock quarry beyond the limitations set by the current small miner exclusion statement (SMES). The proposal is to continue mining and processing talus gravel material from a west facing hillside in the Flathead Valley on a larger scale.

Public comment on this EA will be received by the DSL until 5:00 p.m. May 14, 1993. Comments should be about the following: adequacy of the EA in assessing issues, new information not considered that may influence the analysis, and clarification. Comments should be specific. The DSL will use these comments, staff responses, the EA, and the application to make a final decision on the permit. The decision may be to approve the proposal as submitted, approve the proposal as modified by staff reviews, deny the proposal, or approve the proposal with additional modifications.

Comments will be accepted by phone (406) 444-2074, or by written comments directed to:

Bob Winegar
Montana Dept. of State Lands
Capitol Station
Helena, MT 59601

Thank you for your time and consideration. Please call if you have any questions.

Sincerely,

Bob Winegar

Robert C. Winegar
Program Supervisor
Hard Rock Bureau
Reclamation Division

/etc

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HELENA, MONTANA 59620

ENVIRONMENTAL ASSESSMENT

APPLICANT: Weaver Gravel

TYPE OF OPERATION: Gravel & Rock Quarry

LOCATION: West ½ Sec. 11, T29N, R20W COUNTY: Flathead

PERSON PREPARING E.A.: Jeffrey Snyder

APPLICATION COMPLETE: April 9, 1993 (Date) E.A. COMPLETE: April 30, 1993 (Date)

				POTENTIAL IMPACTS		
	A	B	C	LONG TERM	SHORT TERM	AMPLIFICATION
PHYSICAL ENVIRONMENT						
1. TOPOGRAPHY			X	X		SEE DISCUSSION
2. GEOLOGY; Stability			X		X	SEE DISCUSSION
3. SOILS; Quality, Distribution			X		X	SEE DISCUSSION
4. WATER; Quality; Quantity; Distribution			X			
5. AIR; Quality			X			SEE DISCUSSION
6. UNIQUE, ENDANGERED, FRAGILE, or LIMITED environmental resources			X			
BIOLOGICAL ENVIRONMENT						
1. TERRESTRIAL, AVIAN, and AQUATIC; species and habitats			X			
2. VEGETATION; quantity, quality, species		X			X	SEE DISCUSSION
3. AGRICULTURE; grazing, crops production			X			
HUMAN ENVIRONMENT						
1. SOCIAL; structures and mores			X			
2. CULTURAL uniqueness, diversity			X			
3. POPULATION; quantity and diversity			X			
4. HOUSING; quantity and distribution			X			
5. HUMAN HEALTH & SAFETY			X			

				POTENTIAL IMPACTS		
	A	A	C	LONG TERM	SHORT TERM	AMPLIFICATION
6. COMMUNITY & PERSONAL INCOME			X			
7. EMPLOYMENT; quantity and distribution			X			
8. TAX BASE; local and state tax revenue			X			
9. GOVERNMENT SERVICES; demand			X			
10. INDUSTRIAL, COMMERCIAL and AGRICULTURAL activities			X			
11. HISTORICAL and ARCHAEOLOGICAL			X			
12. AESTHETICS		X		X		SEE DISCUSSION
13. ENVIRONMENTAL PLANS and GOALS; local and regional			X			
14. DEMANDS on ENVIRONMENTAL RESOURCES of land, water, air and energy			X			
15. TRANSPORTATION; networks and traffic flows			X			

PUBLIC INVOLVEMENT: Two week public review of draft Environmental Assessment

CUMULATIVE EFFECTS: None

ALTERNATIVES CONSIDERED: No Action, Operation would continue under SMES

COMPLIANCE STATUS: Currently exceeding SMES restrictions, would be in compliance if operating permit is issued.

RECOMMENDATIONS CONCERNING PREPARATION OF AN EIS: Not necessary at this level of disturbance

OTHER GROUPS OR AGENCIES CONTACTED OR WHICH MAY HAVE OVERLAPPING JURISDICTION: None; USFS, Flathead National Forest has adjacent land that has been impacted

INDIVIDUALS OR GROUPS CONTRIBUTING TO THIS EA: Tom Mostad, Pat Plantenberg

A: Significant Unavoidable Impacts
B: Insignificant as a result of conditioned mitigation
C: Insignificant as proposed

Robert C. Winegar
Signature

WEAVER GRAVEL

APPLICATION FOR HARD ROCK MINE OPERATING PERMIT

PROPOSED PLAN

History: Weaver Gravel is operating a rock and gravel quarry on the east edge of the Flathead Valley approximately six miles south of Columbia Falls, Montana under provisions of a Small Miners Exclusion Statement issued by Montana Department of State Lands (DSL) in August 1975. The two main requirements of the SMES are that the disturbance area be kept at or below 5 acres and that no more that 36,500 tons per year can be mined. Recently the operation has exceeded the restrictions set forth by the SMES.

Current Proposal: The mining occurs at the toe of a steep rock talus slope on a west facing hillside of the Swan Range. The weathered rock is excavated from the toe of the talus slope using conventional heavy equipment. The rock is crushed and sorted, in a staging area beyond the slope toe, to obtain various products. The various materials are stockpiled in the staging area until sold. There are no waste rock dumps or tailing impoundments. No soil, that could be used for reclamation, is present on site. The proposal is to mine at least to the year 2002 and would disturb a maximum of 51 acres, which would be contained within the 106 acre permit area.

Reclamation Plan: The future land use of the staging, stockpile, and haul road areas is intended to be pasture and wildlife habitat. The Quarry, particularly the steep talus head wall, will remain at the angle of repose and is marginally practical to be reclaimed. Most of this area will be allowed to naturally revegetate. Weaver will attempt to plant woody species and grass on areas of the high wall that may support plant life. The staging, stockpile, and haul road areas have been and will continue to be graded, contoured, soiled, and reseeded. Weaver would import soil, from off site, to perform reclamation activities on the flat portions of the project area. Any remaining rock or talus material will be used for reclamation contouring. A portion of the haul road will be retained for access to the pasture area. The unneeded part of the haul road will be ripped, contoured, soiled, and seeded with the staging and stockpile areas. Fertilizing, fencing, weed control, and any reseeding will be done as needed.

ENVIRONMENT IMPACT AMPLIFICATION

Topography:

Mining will remove the veneer of talus which will increase the slope by several degrees. The only visible change in slope will occur at very few locations perpendicular to the mine site.

The pre-mining, mining, and post mining topography of the staging area will not change.

Geology:

Weaver Gravel's past and proposed mining process is to mine the toe of the talus slope causing the slope to become instable and consequently the slope begins to slough. The sloughed material is again mined and the process is repeated until all of the desirable material is gone. Slope instability is inherent with this type of mining unless all of the available talus is removed and bedrock is exposed.

Due to this mining process Weaver Gravel has encroached upon Flathead National Forest. In the past few years a small portion of gravel from Flathead National Forest land has sloughed down slope. To mitigate this problem and to prevent any future problems Weaver has committed to only mining in areas that have bedrock outcrops between his operation and the Forest Service boundary. In this way sloughing can progress up slope only as far as the outcrop, thus preventing any encroachment on National Forest.

The instability of the slope due to mining could cause talus material to sporadically fall from the steep slope and would continue to disrupt some trees that now grow on portions of the slope. Gradually the slope will slough until it reaches the angle of repose, the natural talus slope angle which becomes stable, or a steeper slope intercepted by rock outcrops above the removed talus material.

Air:

Weaver is currently operating under an air quality permit from the Air Quality Bureau. If an Operating Permit from the Department of State Lands is obtained it will not change the existing air quality permit. The dust emissions are minimal and water is used to keep most all dust from leaving the project site.

Soil:

Because of the lack of quantity of soil in the staging area and the lack of fines in the talus material to use as a soil substitute, Weaver Gravel has committed to importing up to 4,000 yards of soil to be spread on the staging area to promote reclamation. The addition of soil will greatly reduce the time that it will take for the area to be revegetated.

Vegetation:

Mining will result in a change in the vegetation from current native woody species and grasses. The proposed staging area will be seeded with crested wheatgrass and clover and will be used for grazing and wildlife habitat.

After mining when the talus material has been removed only a thin layer of gravel will overlay solid bed rock slope. Weaver has committed to attempt to plant trees in areas on the slope that are accessible and suitable for tree planting. Weaver Gravel also will consider hydroseeding, aircraft seeding and/or broadcast seeding to promote vegetation growth on the slope.

These attempts to revegetate the mine slope are not expected to completely revegetate the slope but are expected to enhance the long term natural revegetation of the slope.

Aesthetics:

Past mining has exposed a steep gravel slope approximately 1800 feet long and a 1000 feet high. The upper several hundred feet of the current exposed slope is visible from many areas throughout the Kalispell area. The slope appears as a light tan triangle against the natural light to dark gray outcrops and the green forested area that surrounds the mined slope.

The proposed mine area is adjacent to the previously mined area and after mining would also be tan in color. In the proposed area to be mined the talus rock extends about half as far up the slope as the highest point of the talus rock on the previously mined area. As a result, the height of the proposed mining exposure will extend only about half as far up the slope as the previously mined exposure. Therefore from a distance the proposed mine slope will not be as visible as the previously mined area.